"The judgement of God on an indolent and unself-reliant people"?: The impact of the Great Irish Famine on Ireland's religious demography

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Highlights

- Explores the impact of the Irish Famine on Ireland's religious demography.
- Compares religion as recorded in 1834 with the 1861 census.
- Demonstrates that population loss during the Famine was closely related to pre-Famine poverty.
- Shows that areas whose populations were overwhelming Catholic were disproportionately badly affected.
- Provides evidence that in more mixed areas Catholics and Protestants both suffered.

Abstract

It has suited both sides of Ireland's religious and political divide to portray the Great Famine that affected Ireland in the late 1840s as primarily affecting the Catholic population. However, while the geographies of the Famine have been explored in detail in recent years its religious dimensions have been largely ignored, albeit with a few exceptions. As a consequence, the assumption that Great Famine was a Catholic famine has not been sufficiently challenged. Drawing on a relatively untapped source, the 1834 Commission on 'the state of religion and other instruction in Ireland,' as well as census data, this paper explore the relationship between religion, poverty and population loss over the Famine period. It shows that Catholics were disproportionately affected by the Famine because the Famine was most severe in areas whose population was overwhelmingly Catholic. In more mixed areas, however, the Protestant population seems to have been at least as affected as Catholics if not more so. This conundrum explains why the Famine actually had a surprisingly small impact on Ireland's religious demography.

Keywords: Great Irish Famine; Religion; Poverty; Population change

Abbreviated title: The religious impact of the Great Irish Famine

The famine that started in Ireland in 1845 and lasted until the early 1850s was arguably both the last major famine to affect Western Europe, and has been claimed to be one of the most devastating famines ever in terms of proportional population loss.[1] The repeated failure of the potato crop, caused by potato blight (*Phytophthora Infestans*), wreaked havoc on a society that was heavily dependent on mono-crop subsistence agriculture where the crop in question was the potato. The exact numbers who died will never be accurately known, but 1.1 million deaths from a population recorded at 8.2 million by the census of 1841 is a widely accepted estimate.[2] Even this understates the devastation wrought. The twenty-year period between 1821, the first Irish census which recorded a population of 6.8 million, and 1841 had seen Ireland's population grow by 20.2%. Over the subsequent twenty years the population fell by 29.7% as the effects of emigration and reduced fertility compounded the deaths caused by the Famine. The Famine was followed by a long period of continuing population decline and stagnation which lasted well into the twentieth century. Even today, a century and a half later and after the growth and immigration fuelled by the Celtic Tiger economy, the combined population of the Republic and Northern Ireland is still only 6.5 million, below even the 1821 figure let alone the 1841 peak. [3] This makes Ireland almost unique in Western Europe where most countries' populations have doubled or tripled over this period.

Recent years have seen a significant rise in interest in studying the geographies of the Famine. Many of these studies have used census and similar statistics which, more recently, have been analysed using techniques from historical geographical information systems.[4] As described below, these studies have demonstrated that the Famine was more severe in the west, midlands and south. It was particularly destructive in areas that were highly impoverished and that had high growth rates in the immediate pre-Famine period.

There were also religio-political dynamics to the Famine. The mid and late nineteenth century saw rapid economic growth in the north-east of Ireland based around Belfast and the Lagan Valley with their textile mills and shipyards. At the same time, much of the rest of the island stagnated economically and demographically. Given that Ireland's Protestants lived primarily in the north-east and much of the rest of the island was predominantly Catholic, this created a religious, political and economic divide with Protestants – whose manufacturing-based economy was thriving and linked into the wider British and British Empire economies – being strongly pro-Union. Catholics, by contrast, increasingly saw themselves as a marginalised, rural population suffering at the hands of British misrule and thus turned increasingly towards Home Rule and Irish nationalism.[5] It suited both sides of this divide to

represent the Famine as a largely Catholic phenomenon. To Catholics it was evidence of an uncaring and negligent British state that allowed absentee landlords to make the countryside catastrophically vulnerable to a famine caused by the failure of a single crop, and then failed to deliver effective disaster relief to the stricken population. To Protestants it showed the superiority of their society and its work ethic, and to some it even illustrated their favoured position in the eye of God. The Famine was thus'The judgement of God on an indolent and unself-reliant people.'[6]

This popular conception of the Famine as a Catholic experience might be seen to be the residual effect of many decades of nationalist historiography of the crisis, a tradition established by the early genocidal interpretations of John Mitchel.[7] Unionist elites have also been complicit in this process as Protestant suffering during the disaster was antithetical to notions of Protestant deliverance and providence. It might be thought that such notions have been revised out of the historical narrative. However, during the Northern Ireland peace process, Prime Minister Tony Blair expressed regret for the role of the British government in the crisis. This represented a savvy appropriation of the perceived sectarian imbalance of the Famine for contemporary political agendas precisely because the Famine was effectively 'owned' by the nationalist population as 'their' history.[8] Only very recently have historians started to question this narrative or indeed to explore the impact of the Famine on Ireland's religious demography.

[Figure 1: Ireland's religious geographies in 1834 and 1861]

As described in more detail below, sources do exist that allow changes in religious demography over the Famine period to be explored. Gregory et al. present some basic analyses comparing religion in 1834 with 1861.Their basic finding is summarised in figure 1 which compares the proportion of the population of each diocese who were Catholic in 1834 with the proportion for 1861.[9] Intriguingly, it suggests there was very little change. If the assumption that the Famine was a Catholic famine is correct then the Famine should have changed Ireland's religious composition to make Ireland a more Protestant place due to the higher loss of Catholics. This, in turn, should have changed Ireland's religious geographies. In fact, as Figure 1 shows, the Famine barely seems to have affected these geographies at all. The trend line shows that the Catholic proportion of the population of each diocese was, on average, almost completely unaffected by the Famine. There are some outliers on both sides of this line: Cashel fell from being 97% Catholic to 90% and Down fell from 31% to 26%.

On the other side, Raphoe rose from being 70% Catholic to 77% and Achonry from 95% to 99%. Nevertheless, these changes are relatively minor. The key point is that the change that might be expected – that the Catholic proportion of the population would decline across the board as the Catholic population was depleted by death and emigration – did not happen. Instead, the overall religious geography seems to have been remarkably unaffected, something that can only have happened if the Protestant population was also seriously affected by the Famine. This leads to the central questions that this paper will explore: to what extent was the Great Irish Famine a Catholic famine, to what extent were Protestants also affected, and how did this affect Ireland's religious geographies?

BACKGROUND: DEMOGRAPHIC CHANGE DURING THE FAMINE

As indicated above, there has been a growing interest in using quantitative and geographical approaches to study the Irish Famine. One of the earliest attempts was Joel Mokyr's analysis of mortality where he found evidence of correlations between excess mortality over the Famine period and poverty and illiteracy prior to it.[10] Perhaps reflecting the technology of the time, Mokyr's was a highly statistical study but was performed at county level and its geographical exploration was relatively limited. More recently, geographical information systems (GIS) have been used to explore the Famine geographically as well as statistically. Kennedy et al produced an atlas that described the Famine's geographies using data at barony and poor law union level as well as for counties.[11] As there were around 330 baronies and 160 unions they provide a much enhanced impression of the geography of the Famine when compared to counties. O'Grada and O'Rourke and two papers by Gregory and Ell have statistically analysed the relationship between population loss over the Famine period and a range of other variables at these spatial levels.[12] These variables are mainly census variables linked to poverty, particularly fourth class housing – the lowest class of housing counted in the Irish censuses – and illiteracy in English. More recently, even more spatially detailed data have become available. Smyth presents an analysis based largely around mapping at the level of the 2,500 parishes, and Fotheringham et al. present an analysis based on around 3,500 electoral divisions and a wider range of variables.[13]

While the variables, administrative units and approaches used by these studies vary, taken together they build up a consistent picture of the Famine being worst in the south and west, and of the severity of the Famine being linked to poverty, pre-Famine population growth and dependency on the potato crop. For the small proportion of the entire population living on

offshore islands or in close proximity to the coast it may have been the case that access to alternative, littoral food sources may have acted to offset the Famine's worst effects, but even in these zones, such fortuitous dynamics were the exception rather than the rule.[14] Generally, towns and cities had lower levels of population loss than their rural counterparts, and they sometimes even gained population due to internal migration from Famine-stricken parts of the countryside, offsetting the losses that would have been found even in urban areas. However, such dynamics were negligible and post-Famine Ireland remained a primarily rural society due to the lack of any major industrial concerns outside of north-east Ulster which could attract a major influx of population.[15]

While this basic narrative appears increasingly uncontroversial, the issue of the impact of the Famine on religious geographies has been largely overlooked. A consequence of this has been that 'some scholars may unconsciously have repeated contemporary and subsequent claims by Ulster Unionists, who argue that "Ulster" – that is, its Protestant inhabitants – eluded the Famine.'[16] To challenge this assumption of a lack of an impact on the Protestant population, Miller et al explore the impact of the Famine on ten parishes in east and mid Antrim with high Protestant populations. They show that these parishes had high rates of population loss during the Famine, and are thus able to begin to challenge the assumption of a solely Catholic famine.[17] The difficulty is that their study is only based on a very small number of areas in one of the most Protestant parts of Ulster, and it is therefore difficult to know how applicable its findings are across Ireland as a whole. We thus have a situation in which Gregory et al. argue that the Famine did not change Ireland's macro-level religious geography significantly while Miller et al. claim that Protestants were seriously affected by the Famine in a part of Ireland with a large Protestant population. This suggests that there is a complex religious dynamic to the Famine and presents a compelling argument for a better understanding of the impact of the Famine on Ireland's religious demography. This paper presents an initial attempt to do this. The Great Famine remains probably the most contested area of debate in modern Irish history. As a result, we focus largely on interpreting the quantitative evidence, avoiding speculative forays into the extent to which these patterns can be explained by broader themes such as British colonial policies of the time.

DATA AND APPROACHES

Data on religious demography for the post-Famine period are available from the 1861 census which provides statistics at barony level on the numbers of Catholics and people from the

major Protestant denominations. Earlier census data do not provide details on religion, however the 1834 *First Report of the Commissioners of Public Instruction, Ireland* provides comparable information. This survey aimed to add an enumeration of religion to the 1831 census returns. Where possible the original enumerators, who were familiar with the local area and generally regarded as politically independent, were used to collect the data. Representatives of all the main religious denominations were also involved and a public meeting was held in each parish to present local results.[18] This painstaking processes led to results that have been described as 'remarkably accurate for an early nineteenth-century statistical study.'[19] Our analysis is limited by the fact that this source is not available in digital form at parish level and digitising it would be prohibitively expensive. The digital data are only available for the Church of Ireland's dioceses. There were only thirty-two of these dioceses and they thus provide relatively little spatial detail. Dioceses further suffer from the fact that, while there are also thirty-two Irish counties, the two geographies are very different and cannot easily be compared even at this aggregate level. Currently, however, this source does provide the best evidence we have of pre-Famine religious geographies and it is incumbent on us to use it to better understand the impact of the Famine. Given that no Ireland-wide analysis of the impact of the Famine on religion has been undertaken, this source provides the potential to allow new insights into how the Famine affected the different denominations and changed Ireland's religious geographies.

Comparing religion in 1834 and 1861 requires dioceses to be compared with baronies. As there were 334 baronies and only 32 dioceses, and that baronies nest fairly well within each diocese, barony-level populations have simply been aggregated to the diocese in which their centroid lay.[20] Exploring the data this produces revealed satisfactory results in all but one case: the diocese of Achonry. Achonry was one of the smallest dioceses with a population in 1834 of only 114,000. Its small area consists of only four complete 1861 baronies plus Costello, 57% of whose area lay within Achonry and the remainder within Tuam. Given that Costello's relatively large population of 46,000 in 1861 was entirely allocated to Achonry this will have over-estimated Achonry's population by around 20,000 people. This represents 17.5% of the diocese's 1834 population. Costello's impact on Tuam is less significant as the diocesan population was 478,000 in 1834, meaning that its population in 1861 is likely to be under-estimated by less than 5%. This seems to have been the only significant error resulting from the aggregation process, caused by the unusual combination of Achnory being small in terms of both population and number of constituent baronies, and one of the constituent

baronies with a relatively large population being split approximately in half. An alternative approach to aggregation would have been to use areal interpolation techniques which would probably have given more reliable results in the Achony case but would have made the impact of error more generally more difficult to estimate.[21]

The second component of this study is the use of conventional census data to investigate the extent to which the patterns of religious change corresponded to patterns of poverty and population growth. Rather than follow the multivariate approaches used by Fotheringham et al. and Gregory and Ell, this study instead uses an index of disadvantage to draw together several census variables that provide a proxy for poverty. The use of indices of this type, such as Townsend or Carstairs scores, is well established in modern studies of poverty.[22] Carstairs scores, for example, are calculated using four census variables: unemployment, low social class, overcrowded housing and households lacking a car. These are standardised using z-scores which measure how many standard deviations from the mean each unit's value is. A unit with a z-score of 0.0 has exactly the same value as the mean, while 1.0 means that the value is one standard deviation above the mean and -2.0 is two standard deviations below the mean. The z-scores for each unit are summed for the four variables, the highest values indicate the highest levels of deprivation.[23] This approach has also been used for historical data in England and Wales[24] but has not, to our knowledge, been used in Irish history.

In this case we compute a similar measure for pre-Famine Ireland using three variables from the 1841 census: the percentage of households living in fourth-class housing, the proportion of the population who could not read or write in English, and persons per building, a measure of overcrowded housing that divides the total population of an administrative unit by the number of occupied houses.[25] As well as the index of disadvantage, we also look at population growth in the pre-Famine period, which we define as between 1821 to 1841, and population change from 1841 to 1861 to look at loss during the Famine and its immediate aftermath. All of these measures can be computed at both diocese and barony level. The barony data provide much more spatial detail than for the dioceses, however barony boundaries changed markedly between 1821 and 1861. To ameliorate the effects of these changes most of the barony-level analyses are done by standardising the data onto a 'target' geography that consists of 302 baronies. These are based on the 1831 baronies with a small number of aggregations to avoid issues associated with boundary changes. They allow us to make comparisons over time without having to consider the impact of boundary changes.[26]

One final limitation of our data is that we use the period from 1834 or 1841 until 1861 to represent what we term the "Famine period." This is clearly longer than is desirable. 1845 was the first year in which the potato crop was seriously affected by blight and the Famine is generally seen as ending between 1849 and 1852. This means that our Famine period includes several years of unrecorded pre-Famine population growth, and a post-Famine period lasting around a decade in which emigration and death still caused huge population decline. In the 1840s (1841-1851) – the immediate Famine period – Ireland lost 19.8% of its population. The 1850s saw the loss of a further 11.5%, the second highest decade of population loss in Ireland's history whose scale can directly attributed to the immediate aftermath of the Famine. This means that it is not unrealistic to include this latter decade as part of the 'Famine period' even if the immediate failure of the potato crop had passed by the early 1850s.

VULNERABILITY IN THE PRE-FAMINE PERIOD

[Figure 2: Pre-Famine Ireland at barony-level showing (a) population growth 1821-41, (b) population density, 1841, and (c) the index of disadvantage, 1841]

Figure 2 explores Ireland in the immediate pre-Famine period showing population growth, population density and the index of disadvantage. It shows clearly that rapid population growth was taking place in the west and south, in areas that the index of disadvantage reveals to be impoverished and that remained sparsely populated even after this growth had taken place. Rapid population growth at this time was not exceptional. Many European countries either were, or would later, go through the same experience. Elsewhere, however, this growth was soaked up by the cities which grew rapidly while rural populations tended to remain roughly static. In Ireland this did not happen. While urban centres such as Dublin, Belfast and Cork, in particular, were growing, these three cities only grew by 154,000 in total between 1821 and 1841, a mere fraction of the 1.4 million by which Ireland's population grew over the same period. The lack of urban areas that could absorb population meant that, in the era that preceded mass emigration, growth remained concentrated in rural areas with the population increasingly reliant on the food that these areas could grow. In Ireland's mild wet climate and poor soils the potato was one of the few crops that could provide sufficient nutrition for the population grow.[27] It should be noted that the apparently low population densities of rapidly growing rural baronies in the south and west may, in fact, be misleading. In reality, much of the land area of many of these units was uninhabitable. Although it is

unmeasurable, the later focus of the Congested Districts Boards (CDBs) suggests that the inhabitable parts of these baronies may actually have had surprisingly high densities. [28] These low densities might thus be argued to be an indicator of just how marginal agriculture was in these areas.

[Table 1: Correlation coefficients for population growth 1821-41]

Table 1 explores the relationship between pre-Famine growth and poverty in a more statistical way by showing the correlation coefficients between population growth and population density, the index of disadvantage, and the three individual measures that make up this index. It uses both the parametric Pearson's coefficient and the non-parametric Spearman's Rank. In all cases except the Spearman's coefficient for persons per inhabited building there are strongly significant relationships confirming the pattern shown by Figure 2, namely that growth was occurring in areas that were sparsely populated and deprived. It is also noticable that the index of disadvantage has a more strongly positive correlation with population growth than its three constituent variables, suggesting that this is doing an effective job of measuring the growing population pressures.

[Figure 3: Religion 1834]

As stated above, it is not currently possible to map religion in 1834 at barony level. Instead, Figure 3 shows the distribution of Catholics in 1834. The distribution of Protestants can be taken as the inverse of this. The pattern is fairly predictable. Protestants made up a significant minority of the population in and around Dublin and in an area that approximates to the nine counties of Ulster. Protestants only made up a majority of the population in the three dioceses in the north-east of Ulster: Connor, which approximates to County Antrim and included most of the city of Belfast, and Down and Dromore which are south-east and south-west of the city respectively. Over most of the rest of Ireland, Catholics made up the overwhelming majority of the population, typically well over 90%.

[Table 2: Correlates with pop growth a diocese level]

Table 2 investigates the relationship between population growth, deprivation and religion at diocese level in the pre-Famine period. It is important to note that the modifiable areal unit problem means that changing the administrative units used in a statistical analysis will result in changing the correlations found between variables as a result of both the changes in the scale of the unit and changes in their arrangement. In particular, decreasing the number of

units used tends to increase correlations.[29] The aggregation of much of the data from 302 baronies to thirty-two dioceses results in both of these issues, but particularly those resulting from the increase in scale. In general, this means that results at barony level should be given more credence than their diocesan equivalents which need to be interpreted with caution. A second issue is that the percentage of Catholics is heavily skewed with twenty-three dioceses being over 85% Catholic and only three being less than 50%. Table 2 shows that the relationship between population growth and population density, fourth class housing and illiteracy remains strong when the data are aggregated to diocese level. The major change is that persons per building is no longer significant at the $p<0.05$ level, although it remains close with p-values of 0.055 and 0.064 for Pearson's and Spearman's Ranks respectively. A consequence of this is that the index of disadvantage seems less effective at this level of aggregation, although it remains significant at the $p<0.05$ level. Perhaps more interestingly, using Spearman's Rank, the percentage of Catholics in 1834 is actually more closely correlated with population growth than any other variable, suggesting a very close relationship between population growth and Catholic areas.

[Table 3: Correlated with Catholics at diocese level]

Table 3 shows that the Catholic population is very closely correlated with the index of disadvantage, with the exception of persons per building, but is less closely correlated with population density. In summary, in the immediate pre-Famine period much of Ireland had a population that was overwhelmingly Catholic. These areas, concentrated in the west and south, tended to have high levels of deprivation and high levels of population growth. Not all areas with high Catholic populations had high population growth, but it is striking that all of the dioceses with high population growths were also overwhelmingly Catholic. Drawing from the existing literature, this would suggest that the Catholic population was much more vulnerable to the Famine as the areas that could be predicted to be most vulnerable to it also had very large Catholic majorities. This will be investigated in the next section.

THE IMPACTS OF THE FAMINE

[Table 4: Population change by religion during the Famine]

In the period between 1834 and 1861 the population of Ireland fell by 27%. This was driven primarily by Famine-related deaths and emigration, although fertility decline may also have been relevant. Table 4 sub-divides this by religion, comparing data from the 1834

Commission and the 1861 census. Superficially, these results seem to support the idea that Catholics were the main victims of the Famine. Of the 2.15 million people lost over the period, 90.9% were Catholic, and for every Protestant lost 7.94 Catholics were lost. This ratio is, however, slightly misleading as before the Famine Catholics outnumbered Protestants by 4.24 to one. The last three columns of Table 4 take this into account. They are based on the assumption that population loss can be expected to be evenly divided between the different religious denominations. If this was the case, the population of each denomination would have declined by 27.0%. The figures show that Catholic loss was slightly above this at 30.4% while Protestant loss was below this at 16.2%. This means that the total loss of Catholics was only 3.4 percentage points above what would be expected if the Famine had affected the two denominations evenly, while the loss of Protestants was 10.8 percentage points below what would be expected. Thus, far from the Famine only affecting Catholics, once the relative sizes of the two populations are taken into account, population loss of Catholics was higher than that for Protestants but Protestant loss was also significant. One final point is that the sources allow us to sub-divide Protestants into Church of Ireland, Presbyterians, and others. Doing this shows that over the Famine period the Protestant church seemed to be affected by schisms and reconstructions with the rapid growth of 'other' Protestants, albeit from a very low base.[30] This makes interpreting the changes among the two large denominations difficult as these numbers are affected by conversion as well as natural increase and migration. Nevertheless, the two major Protestant denominations seem to have been affected to approximately the same extent, although Presbyterians seem to have been slightly more resilient than the Church of Ireland.[31]

[Figure 4: Pop loss during the Famine]

Figure 4 shows population loss from 1841 to 1861. In contrast to the previous two decades, only ten baronies show positive population growth: these are found in Dublin, Belfast and other parts of north-east Ulster, Derry/Londonderry and County Kildare. As would be expected from the literature, the south and west of the country were the worst affected parts with losses frequently over 40%. The northern part of Ireland clearly has the lowest rates of decline but even here losses, while typically below the national rate of 27.0%, are still high, particularly when contrasted with the previous decades. At diocese level, Connor, in the far north-east, was the only diocese to show any growth and this was of only 3.6%. This was probably a result of Belfast being both relatively resilient to the Famine and attracting in-migrants from afflicted areas.

[Table 5: Barony correlations with pop chan 41-61]

[Table 6: Diocese correlations with pop chan 41-61]

Tables 5 and 6 show the barony-level and diocese-level correlation coefficients between population change over the Famine period and population density, pre-Famine growth, the index of disadvantage, and the three variables that make it up. The confirm the link established in the literature between population loss and poverty, with illiteracy in 1841 being a particularly good predictor of subsequent population loss. Variables associated with pre-Famine population change and population density are less significant, which is perhaps a little surprising. Aggregating these data to diocese level, seems to confirm these patterns. The interesting thing in these figures is, however, the strength of the relationship between the proportion of Catholics and population loss which, at 0.745 or 0.711 respectively, is stronger than any other relationship. This suggests that Catholics were more severly affected by the Famine than even their preponderance in vulnerable areas would lead us to predict.

[Figure 5: Caths 1834 and Cath change]

We have thus established that Catholics were more seriously affected by the Famine than Protestants because they lived in areas that were more vulnerable. There is, however, a risk that simple correlations do not convey the complexity of the patterns and relationships that are occurring. Figure 5 shows a scatterplot that compares the Catholic population in 1834 with the subsequent decline in the Catholic population until 1861. There is a correlation between these two variables of -0.420 or -0.429 using Pearson's and Spearman's Ranks respectively which are both significant at the $p<0.05$ level.

This, however, only tells part of the story. Rather than explore the linear relationship between the two sets of values, it is possible to identify three different clusters of dioceses. First, and most obvious, are those areas where a high proportion of their populations were Catholic in 1834 and which subsequently suffered a high decline in this population. This cluster might be bounded by being at least 80% Catholic in 1834 and having subsequent declines of over 15%. Twenty-two of the thirty-two dioceses would fall in this cluster, which experienced an average decline of 36% from a population that was, on average, 94% Catholic. The second cluster is those that have lower Catholic populations but that still experienced a high loss of Catholics. These dioceses have fairly mixed religions with Catholic populations between 30 and 66% but still had losses of over 15%, indeed these losses average 28%, which is lower

than the more strongly Catholic areas but nevertheless still high. The third cluster is those that had low Catholic losses but whose Catholic populations vary widely. These have losses of less than 6.5% but their Catholic populations vary from 26% to 95%.

[Figure 6: Cath clusters]

These clusters are mapped in Figure 6. This shows that the majority of Ireland had a high Catholic population and this population was subsequently devastated by the Famine. In much of Ulster there was a lower pre-Famine Catholic population but this was still heavily affected by the Famine. The areas of low Catholic loss are primarily associated with the urban centres of Belfast and the Lagan Valley, Dublin and Waterford. The resilience of these four dioceses can probably be explained either by the urban population being more resilient to the Famine or by in-migration of Catholics from devastated rural areas keeping the population stable. This would not explain Raphoe in the north-west, which approximates to County Donegal, and Achonry to its south. Achonry can probably be discounted due to the data issues discussed above. Raphoe is more difficult to explain. It has been suggested that proximity to the coast allowed famine victims to fish and it may be that this made this relatively coastal diocese resilient to the Famine.[32]

[Figures 7 & 8: Same for Protestants]

Figures 7 and 8 repeat this exercise for the Protestant population. Here four clusters can be identified. First there are those with a low Protestant population, less than 20% and frequently much less, whose Protestant populations remained relatively stable. Dioceses in this cluster are found primarily down the west coast. The 66.8% growth in Emly is misleading as this was a raise from 1,250 to just over 2,000, illustrating just how low the Protestant populations of some of these areas were. The next two clusters are those with higher Protestant losses. In Ulster and Dublin these typically started with relatively high Protestant populations of over 20%, while for most of the south these had lower Protestant populations. Nevertheless, these areas both suffered high losses of Protestants with an average loss of 34% in the areas with lower Protestant populations and 26% in Dublin and the more northern areas. The final cluster consists of the two dioceses around Belfast: Connor and Dromore. Both of these had Protestant majorities before the Famine and the Protestant population barely changed between 1834 and 1861. Importantly, a quarter of the island's Protestants lived in these two dioceses, showing just how geographically concentrated Ireland's Protestants were.

Drawing the two denominations together suggests a complex pattern of religious change during the Famine. The populations of Connor and Dromore held up well for both Catholics and Protestants. The industrial revolution was beginning to take hold in Belfast and the Lagan Valley where the economy was becoming increasingly based around textile mills and a nascent ship-building industry. These industries provided employment opportunities that were open to both Catholics and Protestants (albeit with segregation and discrimination) and diversified the economy away from rural subsistence while also drawing in migrants from rural areas. In the west the Catholic population was devastated while the tiny Protestant population held up well. This can probably be explained by the Protestants mainly being either wealthy landowners or having well-paid occupations and thus being relatively insulated from the impacts of the Famine. In the more urban parts of the south, Dublin and Waterford, the Catholic population remained reasonably constant while the Protestant population declined. The exact mechanisms behind this can only be speculated upon but Catholic in-migration to these areas may be part of the explanation. For much of the rest of Ireland both Catholic and Protestant populations were heavily affected. These areas contained 52% of the Catholic population and 18% of Protestants. Even in these areas, however, there seems to have been a different dynamic between Catholics and Protestants with there being no significant correlations between Catholic and Protestant population losses in these areas.[33]

[Figure 9: Actual to expected]

Figure 9 explores the difference between Catholic and Protestant population decline during the Famine in a slightly different way. Table 4 established that for every decline of one Protestant between 1834 and 1861 the Catholic population declined by 7.94. Applying this ratio to the diocesan decline in total population between 1834 and 1861 provides the population declines of Catholics and Protestants that would be expected if the national pattern of decline had occurred homogenously across Ireland. Figure 9 reveals that this national trend was rarely followed more locally. Indeed, in only two dioceses, Ardagh in the north Midlands and Leighlin south-west of Dublin, do the actual pattern of losses broadly follow this pattern. For most of the rest of the country there were either significantly more Catholics lost than would be expected, or significantly more Protestants than expected. As with the previous analysis there is a clear geography to this. Away from Ulster and Dublin, Catholic losses were much higher than would be expected given the national pattern. In all but one diocese, Meath, these losses were over twice what would be expected and in four – Tuam, Kilmacduagh, Ardfert & Aghadoe and Cashel – Catholic losses were five times higher than

would be expected from the national ratio. In two of these – Kilfenora and Emly – there was actually a gain of Protestants alongside a major loss of Catholics although, as was established above, this is against a backdrop of very small Protestant populations in these two dioceses. Thus the areas where loss either reflects the national aggregate or where Catholic losses were higher than would be expected (often significantly higher) were found in the south and west in areas that were overwhelmingly Catholic. 4,438,000 Catholics were enumerated in these dioceses in 1834 compared to only 247,000 Protestants or, to put it slightly differently, these areas contained 71.2% of the country's Catholics and only 16.5% of its Protestants. Therefore, areas with very high Catholic populations were not only disproportionally heavily affected by the Famine, their losses typically fell very heavily on their Catholic populations because their Protestants tended to be more affluent and insulated from the Famine's effects.

The remaining dioceses are either in the north or on the east coast. Across the three dioceses of southern Ulster – Kilmore, Clogher and Armagh – and in Ferns, south of Dublin, there was a higher loss of Protestants than the national ratio would have us expect. In Derry and Down approximately even numbers of Catholics and Protestants were lost. In 1834 Derry was 53.4% Catholic while Down was 31.0% Catholic, suggesting that in these parts of Ulster the ratio of losses between Catholics and Protestants was close to one to one in Derry and weighted towards more Catholic losses in Down. In Waterford, Dublin, Dromore and Raphoe the number of Protestants lost exceeded that of Catholics. Finally, Connor is again exceptional, experiencing a slight loss of Protestants (2.7%) and a modest gain in Catholics (7.6%). This can probably be largely explained by in-migration into Belfast, particularly by Catholics, combined with a loss of Protestants from the more rural parts of the diocese.

This shows, therefore, that where there were significant Protestant populations these were often at least as badly affected by the Famine as Catholics. The nine dioceses that were more than 15% Protestant in 1834 contained 81.6% of the Protestant population. These dioceses experienced a 15.9% decline in their total populations between 1834 and 1861 which, while not quite as high as the 27.7% losses experienced across Ireland as a whole, was still little short of catastrophic. Importantly, these losses were almost evenly divided between the two religions: the Catholic population dropped by 16.9% while the Protestant population fell by 14.5% suggesting that in these areas the Protestant population was as vulnerable to the Famine as Catholics.

CONCLUSIONS

Famine-era Ireland can be divided into two main types of area: those that had very low Protestant populations, and those that had Protestant majorities or significant Protestant minority populations. The areas with very low Protestant populations covered most of Ireland away from Ulster and the east coast. They were the most vulnerable to the Famine, having the highest risk factors identified in this and other studies: poverty and high rates of population growth in sparsely populated rural areas that were heavily dependent on subsistence agriculture and the potato crop. These areas suffered the highest losses and, within them, these losses disproportionately affected the Catholic population. This almost certainly reflects the fact that there was a clear socio-economic divide between the religious groups in these areas. Although there are no statistics to confirm this, the small Protestant populations in these areas could generally be characterised as a wealthy elite representing landowners and professionals. As such these Protestants would have been relatively immune to the effects of the Famine. There is also a clear political dimension to this socio-economic divide. Protestant Anglo-Irish landowners were not only wealthy but held much of the political power, while impoverished Catholic tenant farmers and labourers were marginalised from it. This perhaps supports Sen's claim that democracy and a free press prevent famines from occurring.[34]

The situation is complicated by the parts of Ireland with larger Protestant populations. Ulster, Dublin and Waterford had significant Protestant populations and lower levels of vulnerability to the Famine due to having a less rural economy and lower levels of deprivation. These areas were less badly affected by the Famine than the south and west but still suffered losses that would be seen as remarkable in any other circumstances. While the local details vary, there is no convincing evidence that the Catholic population of these areas was any more affected than the Protestant population. Dioceses with large urban populations, notable Connor and Dublin, are difficult to interpret as their population losses are likely to have been offset by high rates of in-migration from rural areas badly affected by the Famine. This in-migration might be thought to have been more Catholic than Protestant, however this is somewhat speculative. Away from the cities, however, there is a consistent pattern of dioceses with significant Protestant populations suffering large losses among both their Protestant and Catholic populations. There seems little evidence, if any, that Catholics within these areas were noticeably more vulnerable than their Protestant neighbours.

To return to Trevelyan's view of the Famine as the judgement of God on an indolent and unself-reliant people, the people worst affected by the Famine were indeed unself-reliant. This was not, however, caused by indolence, but instead by a lack of the industrial growth

required to soak up the excess population, a theme that led to a continuing culture of mass emigration from Ireland in the nineteenth and twentieth centuries. The judgement – whether it came from God or from *Phytophthora infestans* – was not sectarian, instead it reflected the different geographies and socio-economic statuses of the two denominations. Far from being a Catholic famine, the Great Irish Famine was a famine of the rural poor. Over much of Ireland this group was predominantly Catholic, and thus the Catholic population was disproportionately affected. However, the impact on Protestants increased in areas with larger Protestant populations to an extent that in mixed areas it is impossible to say which denomination was more severely affected. As a result, the Famine and its immediate aftermath did not result in major changes to Ireland's religious geography. This matters. The Famine remains a defining catastrophe in Ireland's history and has an enduring power to reinforce the stereotypes from which both communities continue to construct their own self-identities. This paper shows that the experiences of the two communities were more similar than either would tend to assert.

ACKNOWLEDGEMENTS:

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TABLE HEADINGS

Table 1: Correlation coefficients for the barony-level relationship between population growth 1821-41 and measures of disadvantage.

Table 2: Correlation coefficients for the diocese-level relationships between population growth 1821-41 and measures of disadvantage and religion.

Table 3: Correlation coefficients at diocese level between percentage Catholic in 1834 and measures of disadvantage.

Table 4: Population change by religion, 1834-61.

Table 5: Correlation coefficients for the barony-level relationships between population growth 1841-61 and measures of disadvantage.

Table 6: Correlation coefficients for the diocese-level relationships between population growth 1841-61 and measures of disadvantage and religion.

FIGURE HEADINGS

Figure 1: The (un)changing religious composition of dioceses between 1834 and 1861. The figure shows the percentage of the population identified as Catholics at the two dates.

Figure 2: Pre-Famine Ireland at barony-level showing (a) population growth 1821-41, (b) population density, 1841, and (c) the index of disadvantage, 1841. The class intervals in 2b use a geometrical progression, the others are defined manually.

Figure 3: Religion in pre-Famine Ireland. The Catholic proportion of the population in 1834 at diocese level.

Figure 4: Population loss, 1841-61 at (a) barony and (b) diocese level. Nationally there was a loss of 27.0% of the population. Class intervals are based on this number and increasing and decreasing it by half. Note that in (b) barony-level population figures were aggregated to diocese-level.

Figure 5: The relationship between the Catholic population in 1834 and change in Catholic population 1834-61 at diocese level.

Figure 6: Clusters of 1834 Catholic population and Catholic population loss 1834-61.

Figure 7: The relationship between the Protestant population in 1834 and change in Protestant population at diocese level 1834-61.

Figure 8: Clusters of 1834 Protestant population and Protestant population loss 1834-61.

Figure 9: Relative losses of Catholics and Protestants, 1834-1861. Catholic decline would be 'expected' to be 7.94 times higher than Protestant based on the national pattern.

TABLES

	Pearson's coefficient	Spearman's Rank coefficient
Population density, 1821 (logged)	-.417**	-.400**
Index of disadvantage, 1841	.322**	.354**
Fourth class housing (%), 1841	.296**	.362**
Persons per inhabited building, 1841	.244**	.107
Illiteracy, 1841	.295**	.324**

Table 1: Correlation coefficients between population growth 1821-41 and measures of disadvantage at barony level. **significant at $p<0.01$.

	Pearson's coefficient	Spearman's Rank coefficient
Population density, 1821 (logged)	-.504**	-.456**
Index of disadvantage, 1841	.425*	.466*
Fourth class housing (%), 1841	.621**	.566**
Persons per inhabited building, 1841	-.343	-.311
Illiteracy (%), 1841	.486**	.477**
Catholics (%), 1834	.258	.581**

Table 2: Correlation coefficients between population growth 1821-41 and measures of disadvantage and religion at diocese level. **significant at $p<0.01$, *significant at $p<0.05$.

	Pearson's coefficient	Spearman's Rank coefficient
Population density, 1821 (logged)	-.348	-.371*
Index of disadvantage, 1841	.766**	.735**
Fourth class housing (%), 1841	.428*	.599**
Persons per inhabited building, 1841	.218	.212
Illiteracy (%), 1841	.731**	.721**

Table 3: Correlation coefficients between percentage Catholic in 1834 and measures of disadvantage at diocese level. **significant at $p<0.01$, *significant at $p<0.05$.

	1834	1861	Change	Change (%)	Expected change	Surplus loss	Difference (%)
Tot Pop.	7,943,940	5,796,645	-2,147,295	-27.0			
Catholic	6,427,712	4,475,626	-1,952,086	-30.4	-1,735,482	216,604	3.37
CoI.	852,064	675,689	-176,375	-20.7	-230,057	-53,682	-6.30
Pres.	642,356	521,567	-120,789	-18.8	-173,436	-52,647	-8.20
Other Prot.	21,808	73,117	51,309	235.3	-5,888	-57,197	-262.28
Total Prot.	1,516,228	1,270,373	-245,855	-16.2	-409,382	-163,527	-10.79

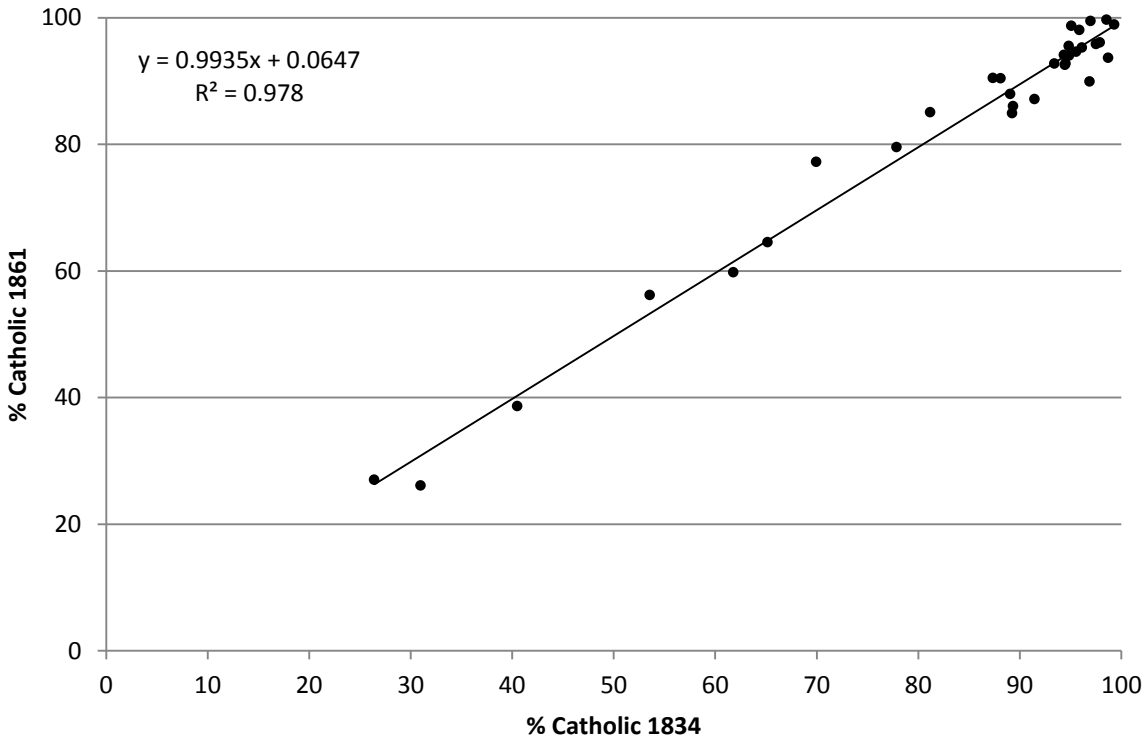
Table 4: Population change by religion, 1834-61. 'CoI.' Church of Ireland; 'Pres.' Presbyterian; 'Other Prot.' Other Protestants; 'Total Prot.' Total Protestants. 'Expected change' is calculated from the assumption that all religions should have experienced a 27.0% loss. 'Surplus loss' is the difference between the actual and expected changes. The 'difference' is the surplus loss as a percentage of the 1834 population.

	Pearson's coefficient	Spearman's Rank coefficient
Population density, 1841 (logged)	.324**	.084
Population change (%), 1821-41	-.004	-.014
Index of disadvantage, 1841	-.084	-.384**
Fourth class housing (%), 1841	-.344**	.-.338**
Persons per inhabited building, 1841	-0.021	-.201**
Illiteracy (%), 1841	-.423**	-.428**

Table 5: Correlation coefficients between population growth 1841-61 and measures of disadvantage at barony level. **significant at $p<0.01$, *significant at $p<0.05$.

	Pearson's coefficient	Spearman's Rank coefficient
Population density, 1841 (logged)	.392*	.346
Population change (%), 1821-41	-.252	-.299
Index of disadvantage, 1841	-.514**	-.414*
Fourth class housing (%), 1841	-.426*	-.460**
Persons per inhabited building, 1841	.108	-.169
Illiteracy (%), 1841	-.606**	-.537**
Catholics (%), 1834	-.745**	-.711**

Table 6: Correlation coefficients between population growth 1841-61 and measures of disadvantage and religion at diocese level. **significant at $p<0.01$, *significant at $p<0.05$.



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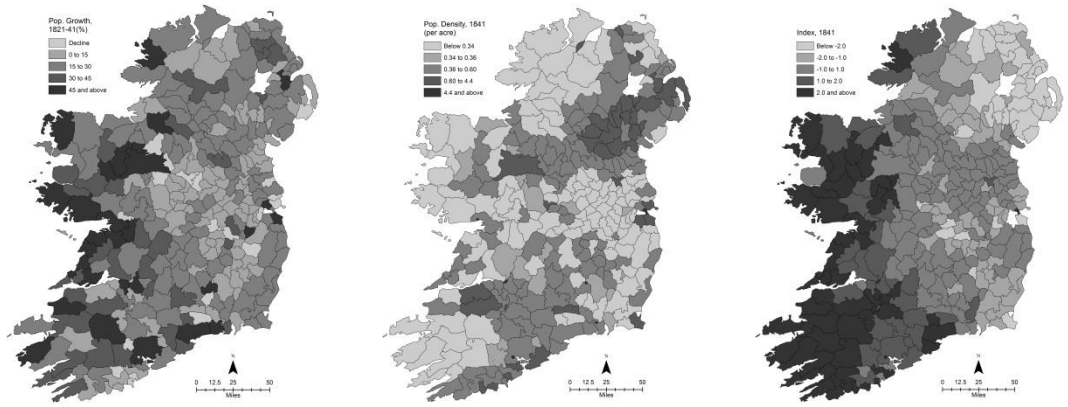

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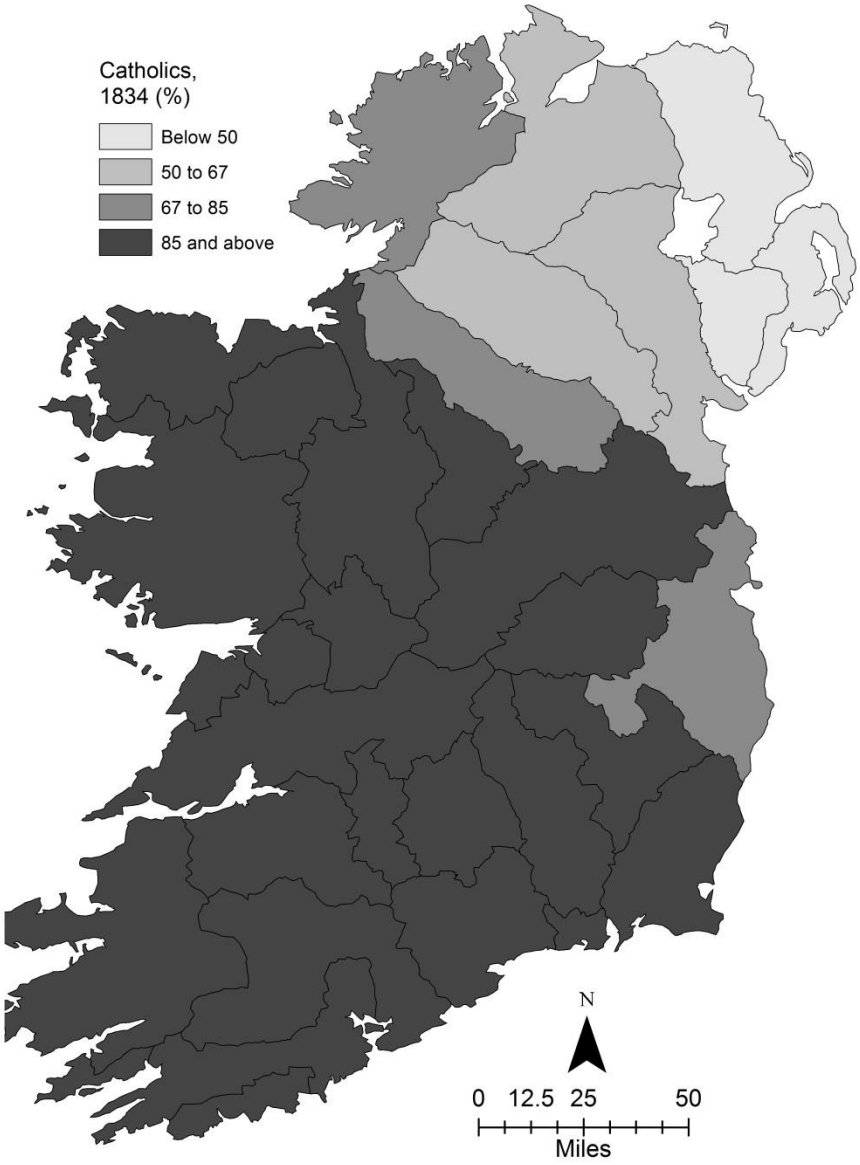

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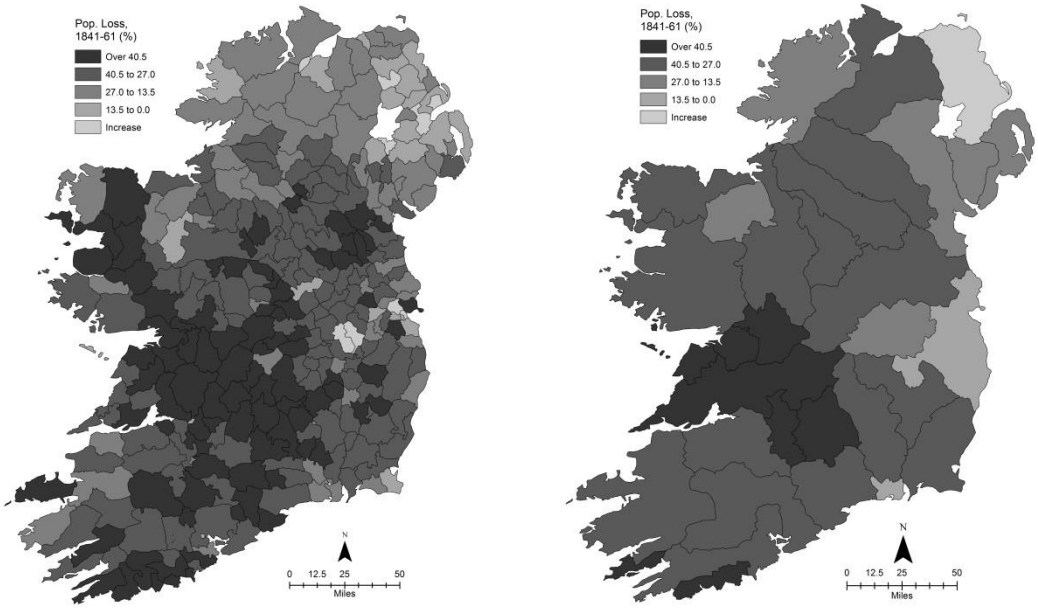

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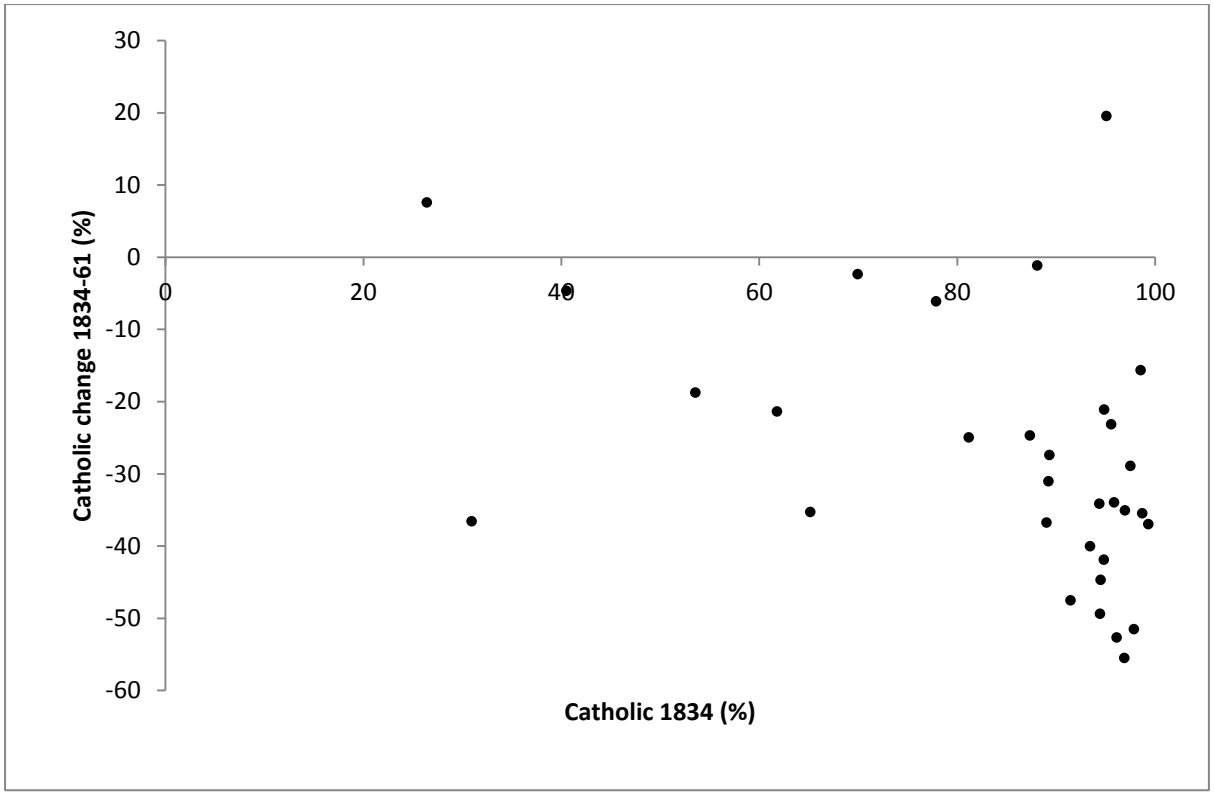


Figure 5: The relationship between the Catholic population in 1834 and change in Catholic population 1834-61 at diocese level.

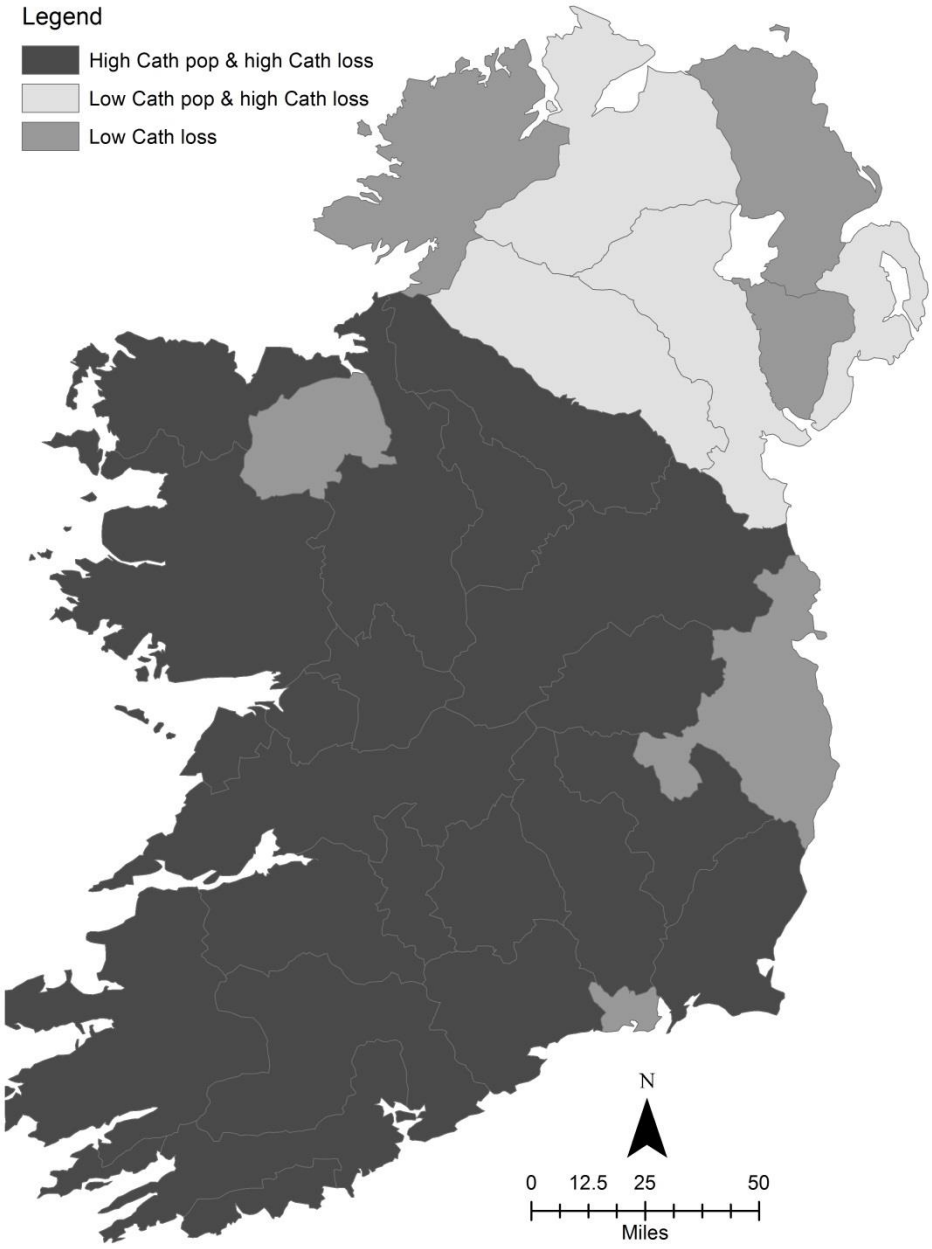


Figure 6: Clusters of 1834 Catholic population and Catholic population loss 1834-61.

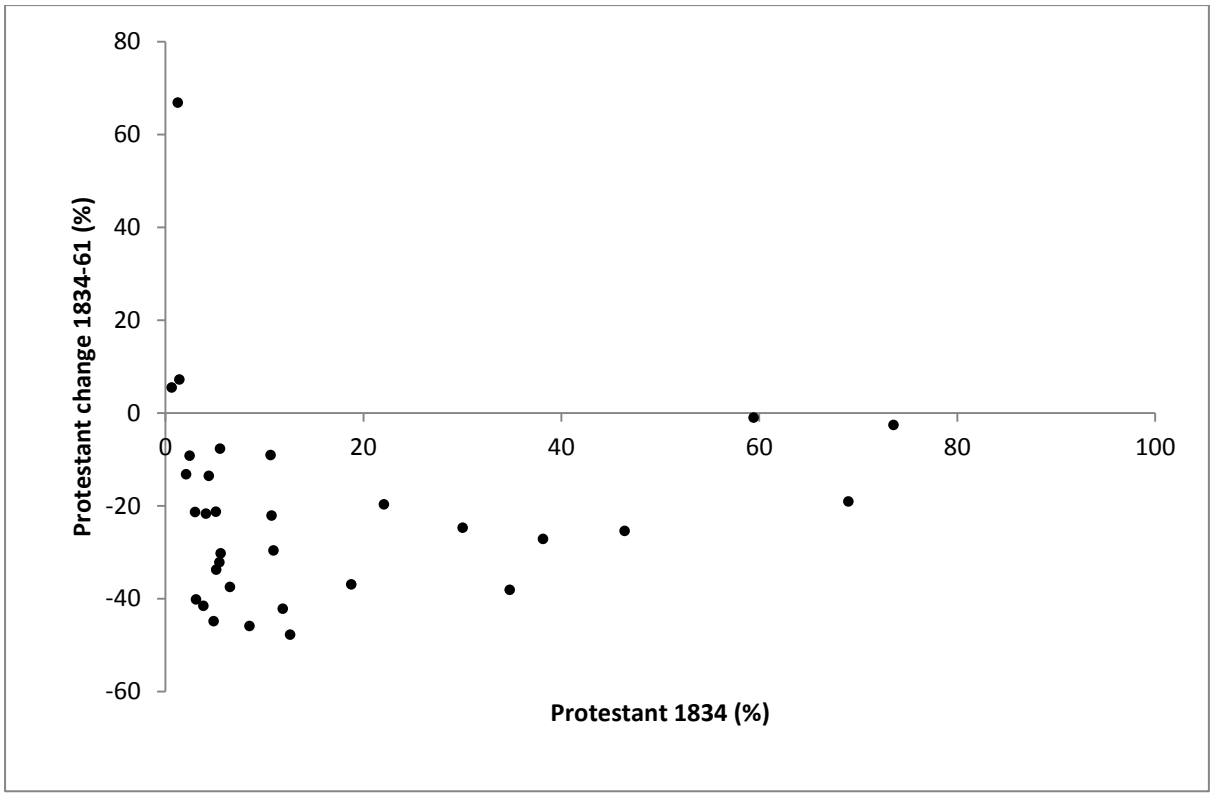
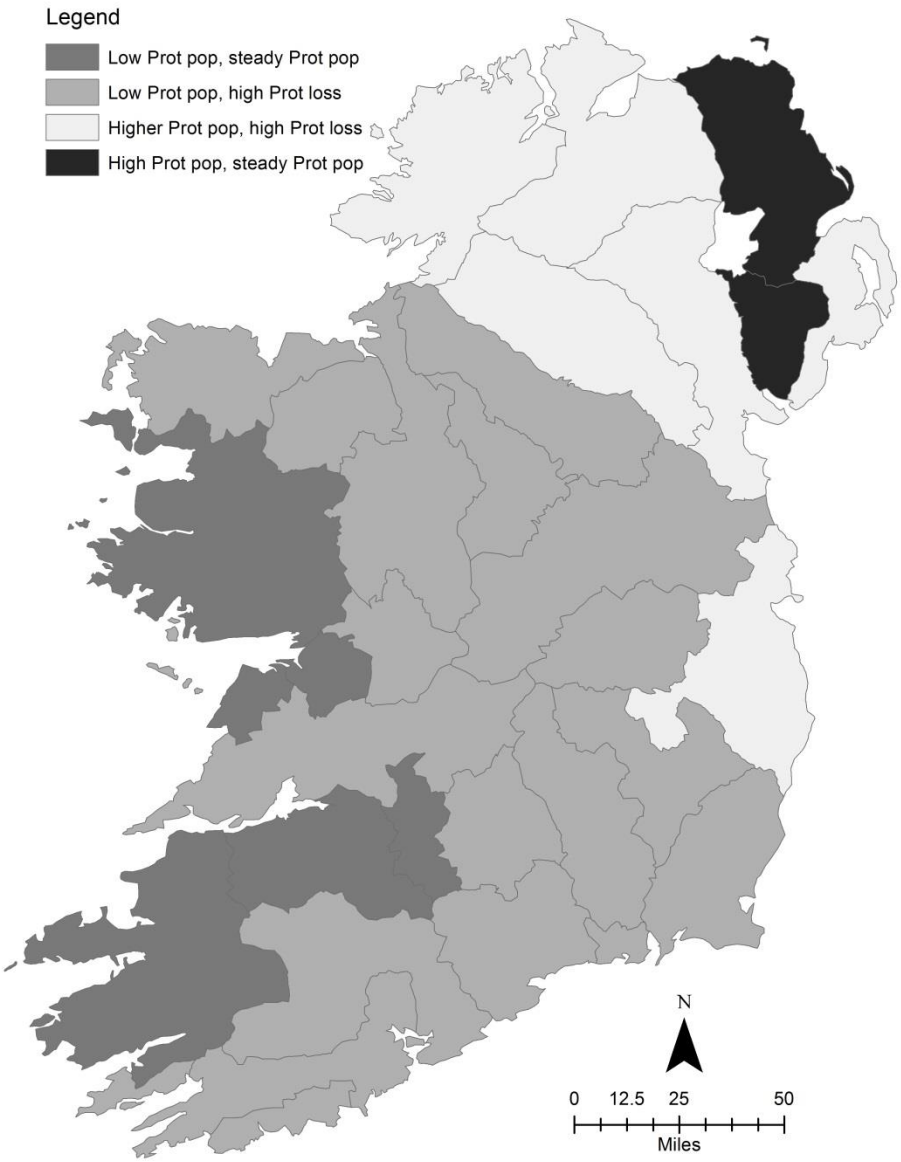


Figure 7: The relationship between the Protestant population in 1834 and change in Protestant population at diocese level 1834-61.



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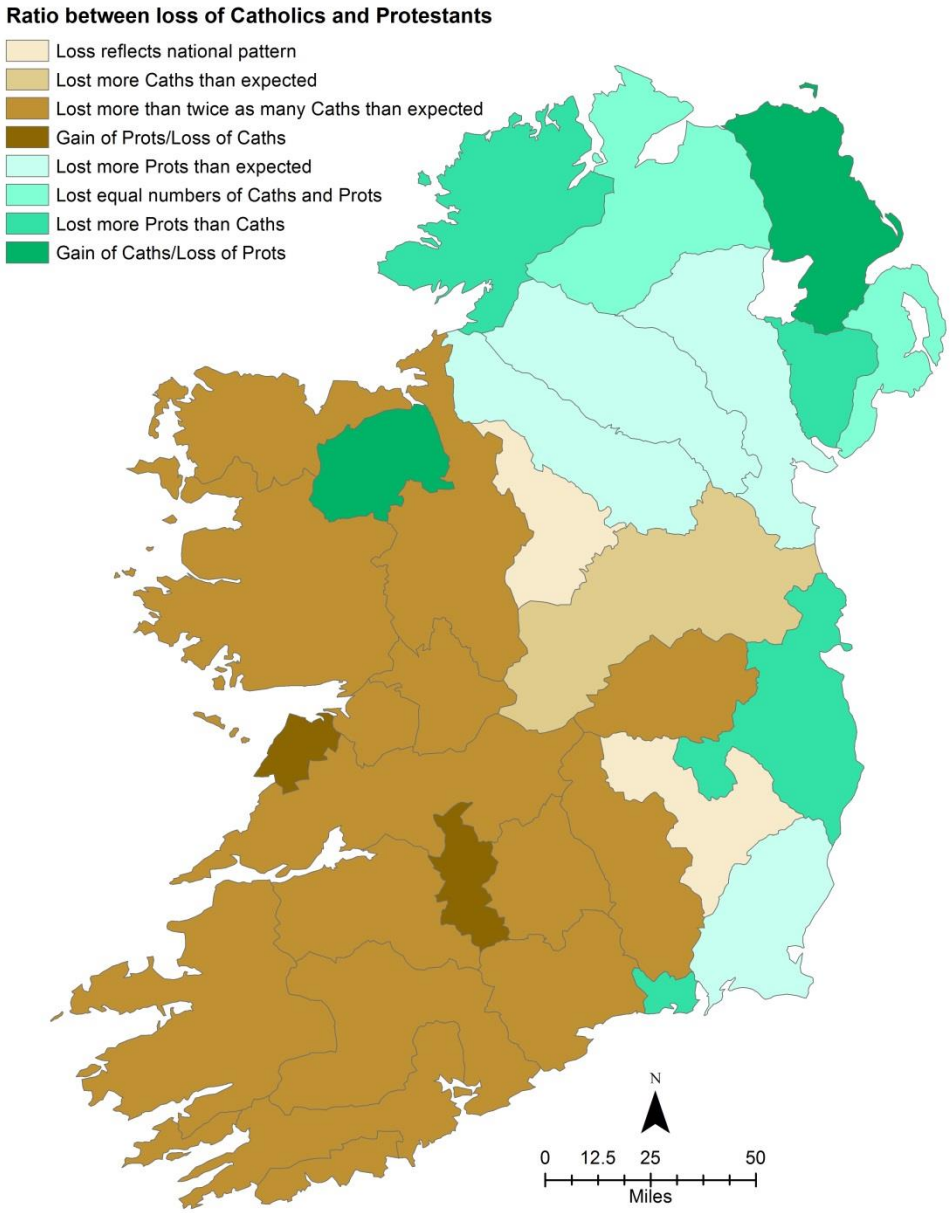

Figure 9: Relative losses of Catholics and Protestants, 1834-1861. Catholic decline would be 'expected' to be 7.94 times higher than Protestant based on the national pattern.

END NOTES

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